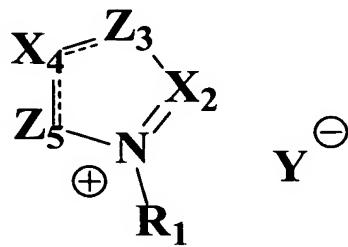


ABSTRACT

Disclosed is a multilayer film comprising a substrate bearing an aligned liquid crystal layer wherein the aligned liquid crystal layer contains an azonium salt represented by formula (I):



I

wherein

10 the subscripts represent the ring positions and each X is independently N or C-R;

each Z is independently N, N-R, C-(R)(R), O, S, SO₂, SO, C=O, C=S, or C=NR;

each R group is independently hydrogen or a substituent; and

15 Y is a charge balancing anion, which may be a separate moiety or part of an X, Z, or R;

provided two or more X, Z and R groups may form a ring;

provided the salt may be part of an oligomer or polymer.

20 Such a film provides a predetermined increase in pre-tilt angle for use in liquid crystal devices.